

XII.—*New Species and Races of Ithomiinæ in the Joicey Collection.* By W. J. KAYE, F.E.S.

SOME striking new species and forms are here described. The race *joiceyi* of *Tithoria bonplandii* is quite stable, as no typical *bonplandii* came with them, and the series of twelve ♂♂ are quite uniform. Haensch, in Seitz, vol. v. p. 119, separates *tamasea*, Hew., with *lugubris*, Hsch., as a distinct species, and *regalis*, Stich., as another species distinct from *bonplandii*; but these are all forms of the same—*bonplandii*.

The three new species of *Pteronymia* are in each case female specimens and only single individuals. They are all remarkably large species, and in the case of *catenata* of curious pattern, the very large marginal spots giving the insect a distinct appearance. Five new species of *Napeogenes* are described and one new subspecies of *Napeogenes*. There are two new species of *Hymenitis*, one *Scada*, one *Callithomia*, two *Epithomia*, one *Hyposcada*, and two *Athesis*. One of the last at first glance looks like a large dark *A. clearista*, but it is a distinct species from N. Peru. The other, a dark subspecies of *Clearista* from Colombia, must be well known, and it seems strange that Haensch did not make for it subspecific rank. The series at Witley shows it to be quite a well-marked race. Typical *Clearista* occurs in Venezuela and also in Colombia, but probably only as an aberration in the latter country.

All these forms and species will be figured after the War.

Athesis clearista colombiensis, subsp. n.

Fore wing darker than in the type-form. The discoidal blotch heavier black, without any ochre colour at lower angle of cell, and the black extending down towards vein 2. In the type-form this is always ochreous. The veins blacker, especially vein 3, which has stripe along it. Hind wing with the veins 3, 4, 5 blacker and the outer margin broader black. Ochre colour at discocellulars and along veins 1 and 2 more reddish than in *Clearista clearista*.

5 ♂♂, 8 ♀♀.

Hab. Colombia, "Interior," Cauca Valley, S. Martin, Llanos of Rio Meta (*G. D. Child*).

Athesis vitrala, sp. n.

Larger than *A. clearista*, darker and more transparent.

Fore wing with costa dark brownish, becoming more ochreous beyond the cell, then again dark blackish brown. Inner margin broadly black. A black band across middle of cell and black discoidal mark. Veins dark. Outer margin very narrowly black, and where it meets costa narrowest. A transparent area between veins 7, 8. Hind wing transparent, the veins very dark brown. Marginal bands narrow. Fore wing below with light brown costa and triangular terminal areas to the veins. Tornus light brown. Just before apex on inner side of narrow marginal band two or three whitish spots. Underside of hind wing with the costa broadly whitish, followed by a broad black band shading off into light brown. A row of white submarginal spots alternately with light brown patches, which run into the dark narrow marginal band.

Expanse 84 mm.

1 ♀.

Hab. N. Peru, River Tabaconas, 6000 feet.

• *Tithorea bonplandii joiceyi*, subsp. n.

Above: Fore and hind wing black with white markings. A trace of yellow scaling along the basal and median veins where the white band crosses. Beneath with a great extension of red marking. Fore wing with a red streak below costa, a broad red band on either side of the subapical line of white dots uniting into a submarginal band. Hind wing with a short red costal streak, a red band on either side of the postdiscal white dotted line, merging into a broad red subcostal band.

Expanse 90 mm.

Hab. Cauca Valley, Colombia; Corinto, May-July.

10 ♂♂, 1 ♂ without locality, 1 ♂ Brit. Guiana (err. loc.!).

This remarkable race of *bonplandii* is so distinct-looking as to at first glance appear as a good species, but in the Joicey Collection is a specimen of *bonplandii latreillei* showing incipient extension of the red markings beneath as to at once suggest racial and not specific rank. The change of colour from yellow to white, although frequently observable in the Heliconidæ, is a rare phenomenon in the Ithomiinæ.

Napeogenes curvilutea, sp. n.

Fore wing orange-brown, with a black streak along the median vein to just beyond origin of vein 2, and another

black streak just below along inner margin. Apical half black, containing a broad curved yellow mark from costa to vein 3. A very indistinct row of greyish marginal spots. Hind wing orange-brown, with a large oblong black patch from base to vein 4 on its anterior side, but only to vein 2 on its posterior or inner marginal side, leaving a curved, gradually tapering bit of the orange-brown ground-colour. Fore wing below similar to above, but marginal white spots very distinct. Hind wing below also with white marginal spots, but smaller and elongated. A black mark within the cell and a black streak along costal vein.

Expanse 57 mm.

3 ♂♂, 1 ♀.

Hab. N. Peru, Pebas, Loreto, 1913.

Napeogenes diaphanosa, sp. n.

Fore wing brownish transparent and black. Costa, inner and outer margins black. Basal half of wing brownish transparent. Apical half black, with a large squarish transparent patch between veins 5 and 7, with a small transparent spot immediately above. A series of three transparent spots, the centre one more elongated, situated near the margin between veins 2, 3; 3, 4; and 4, 5. A series of very distinct white marginal spots. Hind wing brownish transparent, with a broad black marginal band containing a series of white spots. Antennæ black.

Expanse 52 mm.

1 ♂, 3 ♀♀.

Hab. Colombia, Valdivia (*Pratt*, 1897).

Comes nearest in shape and pattern to *Napeogenes amara*.

Napeogenes opacella, sp. n.

Fore wing with the base reddish orange, the costa black; a large black roundish blotch within the cell, followed by an irregularly shaped yellow blotch. Outer two-thirds of wing with the ground-colour black. A large subapical yellow patch with its distal margin curved. Between veins 2, 3 and 3, 4 are irregular yellow blotches. A row of large yellow marginal spots. Hind wing with the base reddish orange, the remainder black, with a marginal row of yellow spots, preceded by a row of three larger irregular yellow spots in the upper half of the wing. At vein 3 the black ground-colour is set back greatly, from thence tapering to a point at

anal angle. Sometimes a black spot between veins 2, 3 close to cell.

Expanse 50 mm.

3 ♀ ♀.

Hab. Colombia, Quebrada de la Sarga, Rio Tomana.

This species figures in some collections as *N. aster*, but it is quite distinct. *N. aster*, Godm., is the Ecuador dark race of *stella*. *N. glabra*, Godm., is exceedingly close to *stella* and is doubtfully of subspecific rank. *N. decora*, Godm., is quite a distinct species with much narrower wings. Haensch, in Seitz, makes these all forms of *stella*, but was evidently unacquainted with the types.

Napeogenes mesosticta, sp. n.

♀. Antennæ yellow-tipped. Fore wing dusky transparent, with black margins tinged with reddish interiorly. No discoidal spot. A very distinct row of submarginal white spots. Inner margin very broadly black from base for one-third, thence tapering to tornus. Costa blackish and a half black spot across centre of cell merged partly in the black costal stripe. Hind wing dusky transparent, with very broad black outer margin tinged internally with reddish. A distinct series of white submarginal spots. Yellowish along inner margin and with a broad black costa widened considerably at base. Fore wing below with the costa, cell-mark, and inner crenulated edging of marginal band broadly brownish red. Hind wing below with the costa broadly brownish red, succeeded by a horizontal black streak, followed by reddish again in outer half of cell. Inner edging of submarginal band broadly brownish red.

Expanse 68 mm.

Hab. Peru, Pozuzo, 5000–6000 feet.

Related to *N. glycera*, but a distinct species.

Napeogenes polymela, sp. n.

Very close to *N. harbona*.

♂. Fore wing black and transparent. The costa black. Discoidal spot black. Outer margin broadly black, with very distinct white submarginal spots. A triangular black patch between median and vein 2. Inner margin broadly black. Hind wing transparent, the outer margin very broadly black, containing a row of very distinct submarginal white spots.

Inner margin yellowish, edged slightly with reddish. Antennæ black.

♀. Similar to male, but no yellow at inner margin.

Expanse 56 mm.

Hab. Peru, Pozuzo, 5000–6000 feet.

This may be only a race of *N. harbora*, the type-form coming from Ecuador. *N. harbora* varies in the hind wing from colourless to yellow-tinged, when it is known as *eunomia*; and it is possible that *polymela* varies in the same way. The apparent difference in the undersides between *harbora* and *eunomia*, the former having a considerable red edging along the margins, is bridged with intermediate forms. *Eunomia* occasionally has strong red markings, although remaining yellow-tinged in the hind wing.

Napeogenes zurippa apobsoleta, subsp. n.

Fore wing with the basal half orange. A narrow black inner marginal line and a somewhat rectangular-shaped black spot within the cell and just touching the outer edge of the orange ground-colour. An oblique yellow median band enclosing a small black discoidal spot from which runs a short black line to origin of vein 10. Apical half wholly black, without any trace of yellow marks. Hind wing brownish orange, with four elongated black patches; the two innermost are nearly completely fused, the third is joined posteriorly, while the smaller fourth is entirely separate.

Expanse 58 mm.

1 ♂.

Hab. Ecuador, without precise locality.

Callithomia alexirrhoe concolor, subsp. n.

Fore wing wholly reddish brown and black. Cell with large black central blotch and smaller spot in the upper corner of the cell. In the large black apical area beyond the cell are placed four large elongate patches of the reddish-brown ground-colour. Inner margin black and a short black costal streak from base. Hind wing reddish brown, with a double row of black spots, those immediately below the cell much the largest.

Expanse 68 mm.

1 ♀.

Hab. Peru, without precise locality.

This subspecies comes nearest *C. infusata*, Hsch. *C. thorax* is a self-coloured race, but has a black apex and only a single row of black spots to the hind wing.

Callithomia viridipuncta, sp. n.

Fore wing with the base black and a black, suffused, transparent patch at the end of the cell. Inner margin black except for a short brownish streak in the middle area. Between veins 2, 3; 3, 4; and 4, 5 are greenish, transparent, elongated patches, the lower one the largest, while the upper two are edged with whitish exteriorly. Beyond vein 5 is a compound greenish transparent area composed of two long patches and two small costal spots. Hind wing unicolorous orange-brown, a small black spot in the middle discocellular, marginal black band just traceable. Fore wing beneath as above, except for four white marginal dots at margin of apex. Hind wing below with a broad black subcostal streak, widest at base and at end of cell. A festooned greyish-black marginal band containing a series of white spots. Antennæ black, with the club yellow-brown.

Expanse 66 mm.

1 ♀.

Hab. Ecuador, without precise locality.

Callithomia viridipuncta, ab. *confluens*, ab. nov.

Fore wing with the transparent patch within the cell without black dusting. The greenish transparent marks between the veins all united, leaving only a large, black, squarish discoidal patch. Hind wing with the central area semitransparent and reaching down to close to margin before vein 4. Black marginal band distinct and very irregular on its inner edge. Fore wing below with traces of a reddish submarginal band. Hind wing below with a very distinct row of white marginal spots within the crenulated black marginal band.

1 ♀ without locality.

Hyposcada attilodes, sp. n.

♂. Fore wing like ♀ of *Leucothyris attalia*, but may be recognized by the pear-shaped translucent spot at tornus and the absence of a transparent spot between veins 3, 4 close to cell. An outer transparent spot is present between veins 3, 4,

but close to margin corresponding with a similar spot in the *Leucothyris*. Costa black. Inner margin broadly black. A wedge-shaped black mark across the cell; a heavy black discoidal blotch extended greatly towards the margin. Three transparent spots close together just beyond cell and lying near costa. Three subapical spots and three marginal dots. Hind wing with a very broad black transverse band extending beyond cell. A row of transparent spots from inner to outer margin smaller than in *L. attalia*, the two at the apex especially so. Two or three small white marginal dots. Underside of fore wing with more black than in the *Leucothyris* species. The band across the cell black, not red-brown, and the white marginal spots small.

Expanse 64 mm.

Hab. Bolivia, no precise locality.

1 ♂.

This remarkable species, so extremely like ♀ *Leucothyris attalia* except for the slender long antennæ, appears to have been undetected till now amongst the series of *L. attalia*. There are, besides the type ♂ in Coll. Joicey, 2 ♂♂ and 2 ♀♀ in the British Museum, and doubtless many others remain to be discovered in various collections. The ♂ of *L. attalia* is very much larger than the ♀, but ♂ and ♀ of *H. attilodes* are about the same size. From the very brief description of *attalita*, Hensch., it is impossible to say if this is the same species. But no mention is made of the different shape or the long slender antennæ, characters which could scarcely have escaped observation.

Scada perpuncta, sp. n.

Fore wing pale transparent yellowish. Costa narrowly grey-black except immediately above cell, where it is yellowish. A large, solid, square, black discoidal blotch. Inner margin black except at base. Broad outer margin black, containing a very distinct row of white spots. Hind wing pale transparent yellowish, with a large solid roundish discoidal blotch. A black marginal band (much narrower than fore wing band) containing series of white spots.

Expanse 42 mm.

4 ♂♂.

Hab. S.E. Colombia, Rio Caqueta (*D. M. Eder & T. Alexander*).

Pteronymia catenata, sp. n.

Fore wing smoky at apex. Cell completely margined with blackish; a broad wedge-shaped mark in the cell and heavy discoidal blotch extending greatly outwards between veins 4, 5. A subapical vitreous spot and a row along outer margin. A small whitish mark beyond cell on costa. Below as above, with all the dark markings dull brownish edged with blackish. Hind wing with some dark scaling along lower discocellular and along median. A very broad dark marginal band containing three very large vitreous spots and one small spot situated above vein 5. Below as above, with all the dark markings dull brownish.

Expanse 70 mm.

1 ♀.

Hab. Peru, Pozuzo, 5000–6000 feet (native collector).

A striking species and quite unlike any other, the very large marginal transparent spots in the hind wing giving the insect a very distinct appearance.

Pteronymia amplificata.

Fore wing transparent, with the costa orange-brown interrupted by a yellow spot just above discocellulars. Discoidal spot large, dark brown, median and veins 2 and 3 orange-brown. Inner margin broadly dark brown. Apex dark brown and a narrow lunular marginal dark band. Against a dark background there are to be seen same yellowish scaling beyond discoidal spot and a series of faint yellow submarginal spots. Hind wing transparent, with a rather broad dark lunular marginal band. Against a dark background a series of large yellowish submarginal spots. Hind wing beneath with large cruciform orange marks at vein-tips and between veins 2, 3; 3, 4; 4, 5 are paired white spots. Between veins 5, 6 and 6, 7 single spots of a different shape.

Expanse 68 mm.

Hab. Ecuador.

1 ♀.

Pteronymia grandipennis, sp. n.

Fore wing smoky transparent. Costa above cell reddish. Discoidal spot narrow and continued down the median to dark inner margin. A small whitish spot on costa beyond end of cell. A row of faint whitish submarginal spots and

some whitish marks beyond the cell, forming a very indistinct sort of band to inner margin. Hind wing above transparent, with a yellowish tinge at anal angle. Some indistinct whitish submarginal spots in apical area, becoming less and less defined towards anal angle.

Expanse 68 mm.

1 ♀.

Hab. ? Peru, Pozuzo.

There is no locality-label on the specimen, but it is in good condition and well set, and as it was amongst some *Velamysta torquatilla* from Pozuzo, Peru, it seems probable that the locality hazarded is correct. The fairly strong mimetic resemblance to the *Velamysta* also lends support to the place of origin.

Hypoleria ina negrina, subsp. n.

Differs from the type-form in the absence of red at anal angle of hind wing.

Expanse 56 mm.

Hab. Ecuador.

Hewitson gave no locality for his *Ithomia ina*, but it probably occurs with other similarly coloured Ithomiine species such as *Ceratinia praxilla* in Ecuador. The two forms may occur together or be racial. The very similarly coloured *Ceratinia oca* and *Napeogenes apulia* have, in addition, yellow tinting on the hind wing, and this is a characteristic of Central-Colombian Ithomiines.

Hymenitis joiceyi, sp. n.

Closely resembles *Dismenitis pardalis*, but easily separable by the neurulation.

Fore wing brownish transparent, with the veins prominently orange when held in certain lights. Costa brownish orange edged narrowly with dark brown. A large, somewhat cruciform, blackish discoidal mark. Inner margin black. Outer margin with blackish triangular patches at the vein-tips of veins 2, 3, 4, 5. Apex with a blackish margin. Paired white dots between the veins, to be seen clearly only when held against a dark background. Hind wing brownish transparent, with a very heavy blackish discoidal patch. A broad black marginal band, deeply sinuous internally, and on the margin between the veins are heavy white spots, becoming smaller towards costa.

Expanse 74 mm.

2 ♀ ♀.

Hab. Ecuador, without precise locality.

Hymenitis oneidodes, sp. n.

Fore wing above yellowish brown, with the veins orange. Costa orange to end of cell, inner margin blackish, tip with blackish border. Veins 2, 3, 4, and 5 with triangular blackish marks at tips, that at vein 3 the largest. An irregular discoidal black blotch spreading over lower discocellular. Hind wing above yellowish brown, with a very broad blackish marginal band, heavily dentated on inner margin, especially between veins 3 and 4. A faint indication in some lights of a yellow macular band from upper discocellular to outer margin. Two yellowish subapical spots and two further yellow spots on outer margin. Fore wing beneath as above. Hind wing beneath with large white wedge-shaped marks in the apical portion of marginal dark band and paired white spots between the veins thence to inner margin.

Expanse 67 mm.

1 ♀.

Hab. Ecuador.

XIII.—Notes on *Fossorial Hymenoptera*.—XXXII. *On new Species in the British Museum.* By ROWLAND E. TURNER, F.Z.S., F.E.S.

Family *Scoliidæ*.Subfamily *ELIDINÆ*.*Elis (Mesa) ugandensis*, sp. n.

♀. Nigra; capite, femoribus anticis apice, tibiis anticis, tarsisque anticis rufis; flagello articulis quatuor apicalibus nigris; alis nigro-violaceis.

Long. 15 mm.

♀. Mandibles bluntly bidentate at the apex; clypeus with a strong carina from the base nearly reaching the apex, the apical margin with two minute teeth in the middle. Antennal tubercles large and rounded; head rectangular, much broader than long, eyes separated from the hind margin of the head by a distance equal to their greatest breadth; posterior ocelli twice as far from the eyes as from each other, and about three times as far from